

REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

A new Abstract is submitted herewith as required by the Office Action.

New claims 8-14 have been added to highlight patentable aspects of this invention. Support for the new claims is provided in, *inter alia*, the original claims, Figs. 3 and 4 and their accompanying description in the specification, and the specification on page 3, lines 7-19.

Claims 1, 4, 5, and 7 were rejected, under 35 USC §103(a), as being unpatentable over Chin et al. (US 6,694,155) in view of Karlsson et al. (US 6,470,192). Claims 2, 3, and 6 were rejected, under 35 USC §103(a), as being unpatentable over Chin in view of Karlsson and further in view of Nishimori et al. (US 6,735,182). To the extent these rejections may be deemed applicable to new claims 8-14, Applicant respectfully traverses.

It is a feature of the present invention to apply an adaptive array antenna technique only to transmission signals of channels to a specific user. By virtue of this technical feature, (1) data for all users and (2) user-specific data employ different antenna techniques for transmission, thereby enabling each user to receive data at a high quality level.

It is another feature of the present invention to apply an adaptive array antenna technique to a diversity transmission technique in the downlink transmission system. By virtue of the above-noted technical features of the present invention, in the downlink, it is possible to prevent the received level at the receiving end from falling suddenly due to fading and shadowing and to minimize the variation width in a transmit power setting. As a result, it is possible to: (1) avoid setting a transmit power that may cause interference against other users and (2) enable detailed transmit power control. Furthermore, according to the present invention, the variation width in the received level is kept minimal, so that the cycle and range of transmit power control can be reduced to lessen the circuit scale and cost.

Karlsson discloses a configuration applying an adaptive array antenna reception technique to a diversity reception technique in the uplink reception system. However, the present invention discloses a configuration applying an adaptive array antenna transmission technique to a diversity transmission technique in the downlink transmission system. Therefore, Karlsson and the present invention are different in configuration.

Because of the above configuration and difference between Karlsson and the present invention, the present invention provides an additional advantage of increasing the cycle of transmitting and

receiving signals that command a transmit power increase and decrease, thus enabling more efficient use of frequency resources. This advantage, in addition to the advantage described above, is not achieved by Karlsson. Moreover, the present invention lengthens the control cycle and range of transmit power control, thereby bringing about yet other advantages of requiring less performance in the transmission amplifier and reduced cost. Karlsson does not provide these advantages.

In addition, the present invention involves applying an adaptive array antenna transmission technique only to transmission signals of channels to a specific user. Karlsson does not disclose this technical feature of the present invention.

By virtue of the above-noted technical features, the present invention makes possible a configuration that applies only a diversity transmission technique to transmission signals on channels, such as common control channels, that transmit common data to all individual users and does not apply an adaptive array antenna technique to such signals. This configuration enables each user to receive data at a high quality level regardless of the data type. Karlsson does not disclose this advantage of the present invention.

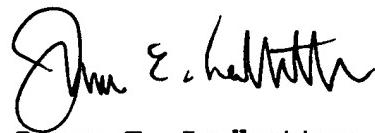
Chin discloses using an array antenna technique, but does not cure the deficiencies of Karlsson.

The present application has a foreign priority date of October 8, 1999, whereas Chin and Nishimori have effective dates of September 5, 2000 and June 19, 2000, respectively. If these references are re-applied in a subsequent office action, the Applicant may submit an English translation of the present priority application to antedate them.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,



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JEL/DWW/att

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